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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SCHMEISER, OLSEN + WATTS			LIN, KENNY S	
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SUITE 201			PAPER NUMBER	
LATHAM, NY 12110			2154	

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/855,360	Applicant(s) GUENTHER ET AL.	
	Examiner Kenny Lin	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-19 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-19, 28 and 31 is/are rejected.
- 7) ☒ Claim(s) 20, 27, 29 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/10/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-9, 11-19 and 27-32 are presented for examination. Claims 10, 20-24 are canceled. Claims 25-26 are withdrawn from consideration.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/05 has been entered.

Allowable Subject Matter

3. Claims 27, 29-30 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is an examiner's statement of reasons for allowance: None of prior art of record teaches or fairly suggests all of the limitations in depending claims 27, 29-30 and 32. Furthermore, Pepe, Gauvin and Gordon reference do not provide a reasonable motivation to add a client connection identifier particularly at the time after intercepting the communication request and before sending the communication request to the server nor to comprise a communication platform client to send data with no physical connection in place.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 5-8, 10-12, 15-18 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe et al (hereinafter Pepe), US 5,673,322, in view of Gauvin et al (hereinafter Gauvin), US 5,790,800, and Gordon et al (hereinafter Gordon), US 6,671,729.

7. Pepe was cited by the applicant in the IDS. Gauvin and Gordon were cited in the previous office action.

8. As per claims 1 and 11, Pepe taught the invention substantially as claimed including a data communication method that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application,

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wherein the client application and the server application employ a second protocol that is mapped onto the first protocol (col.5, lines 48-61), said method comprising the acts of:

- a. Intercepting, by a local proxy acting on behalf of a server application, a second-protocol data communication request from a client application (col.5, lines 48-57, col.7, lines 17-23, 32-34, 66-67, col.8, lines 1-5, 16-25);
- b. Mapping, by the local proxy, the second-protocol data communication request onto the first protocol (col.5, lines 48-59, col.7, lines 17-31, 51-60, 66-67, col.8, lines 1-5, 16-25);
- c. Sending the communication request to a remote proxy using the first protocol (col.5, lines 48-59, col.7, lines 17-34, 66-67, col.8, lines 1-8, 16-25);
- d. Compensating a disadvantageous characteristic of the first protocol (col.9, lines 2-67, col.10, lines 1-6), said compensating comprising ascertaining that a condition exists and respond appropriately to the condition in response to said ascertaining, said condition being a connection condition or a transmission capacity condition (col.9, lines 2-67, col.10, lines 1-6; appropriate response to failures);
- e. Mapping, by the remote proxy, the communication request back onto the second protocol to recreate substantially the second-protocol data communication request (col.5, lines 48-61, col.7, lines 34-38, col.8, lines 6-15, 26-33); and
- f. Delivering the second-protocol data communication request to the server application (col.5, lines 48-61, col.7, lines 34-38, col.8, lines 6-15, 26-33).

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9. Pepe further taught that proxies can be of hardware, software or implemented on a firewall (col.7, lines 1-23). Pepe did not specifically teach that the local proxy is a client interceptor, the remote proxy is the server interceptor and to eliminate the condition in response to said ascertaining. However, it is obvious that since the proxies function to intercept requests, they present the functionalities and abilities of acting or being interceptors. Gauvin taught to use interceptors in intercepting the requests (col.2, lines 38-42, col.9, lines 5-7, col.12, lines 57-63) where the interceptor is a hardware device (col.10, lines 66-67: means for intercepting) (Pepe suggested that the proxy can be hardware). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe and Gauvin because Gauvin's teaching of using interceptors help to implement the proxies of Pepe's method as hardware means to intercept requests and establish communications (Gauvin, col.12, lines 57-63). Furthermore, the teachings of Gauvin's interceptors can be implemented into Pepe's teachings as the proxies since Pepe suggested that the proxies can be in hardware forms.

10. Pepe and Gauvin did not specifically teach to eliminate the condition in response to said ascertaining. Gordon taught to detect that a condition exists and eliminate the condition in response to said detection (col.6, lines 62-67, col.7, lines 1-22; known technique for detecting lost connection and re-establishing connection). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pepe, Gauvin and Gordon because Gordon's teaching of determining broken connections and reestablishing connections enables Pepe and Gauvin's method gain the ability to monitor connections and re-

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establish the loss connections. This also enriches Pepe's teaching of the functions of ascertaining a condition exists and respond appropriately to the condition.

11. As per claims 2 and 12, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 1 and 11. Gordon further taught that the ascertaining comprises determining loss of a connection, and wherein the eliminating comprises re-establishing the connection (col.6, lines 62-67, col.7, lines 1-22; known technique for detecting lost connection and re-establishing connection). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pepe, Gauvin and Gordon because Gordon's teaching of determining broken connections and reestablishing connections enables Pepe and Gauvin's method to monitor connections and re-establish the loss connections.

12. As per claims 5 and 15, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 1 and 11. Pepe further taught wherein the second protocol is connection oriented (TCP, col.7, lines 16-24, 32-38), and wherein the client interceptor and the server interceptor intercept a plurality of connections between the client application and the client interceptor using the second protocol (col.7, lines 32-38, 66-67, col.8, lines 1-5, 16-25), and between the server interceptor and the server application using the second protocol (col.7, lines 32-38, 66-67, col.8, lines 26-33).

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13. As per claims 6 and 16, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 5 and 15. Pepe further taught wherein the plurality of connections using the second protocol are multiplexed onto a single connection of the first protocol (col.8, lines 34-43).

14. As per claims 7 and 17, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 1 and 11. Pepe further taught wherein the first protocol is a wireless communication protocol (col.6, lines 65-67, col.7, lines 32-38, col.8, lines 1-5).

15. As per claims 8 and 18, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 1 and 11. Pepe further taught to comprise the act of opening, by the client interceptor, a connection to the server interceptor using the first protocol following the act of intercepting the second-protocol data communication request (col.8, lines 16-33).

16. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, Gauvin and Gordon as applied to claims 1 and 11 above, and further in view of Batra, US 6,105,067.

17. Batra was cited in the previous office action.

18. As per claims 3 and 13, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 1 and 11. Gauvin further taught to establish communication when request is intercepted (col.2, lines 38-42, col.12, lines 57-63) and Gordon further taught to detect loss of a

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connection and re-establishing the connection (col.6, lines 62-67, col.7, lines 1-22; known technique for detecting lost connection and re-establishing connection). Pepe, Gauvin and Gordon did not specifically teach wherein the ascertaining comprises detecting that a connection is idle, and wherein the eliminating comprises dropping the connection and re-establishing the connection. Batra taught to detect idle condition, drop connection (col.4, lines 10-21, col.11, lines 42-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pepe, Gauvin, Gordon and Batra because Batra's teaching of determining idle period and dropping idled connections enables Pepe, Gauvin and Gordon's method to monitor more specifically and compensate more detail on the protocol, both advantageous or disadvantageous, drop and re-establish idle connections (Batra, col.4, lines 10-21, col.11, lines 42-65).

19. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, Gauvin and Gordon as applied to claims 1 and 11 above, and further in view of van Landegem et al (hereinafter van Landegem), US 5,265,091.

20. van Landegem was cited in the previous office action.

21. As per claims 4 and 14, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 1 and 11. Pepe further taught wherein the ascertaining comprises determining that transmission capacity is insufficient process the data communication request (col.9, lines 26-32). Pepe, Gauvin and Gordon did not specifically teach wherein the ascertaining further

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comprises determining the transmission capacity to process the data communication request within a predetermined interval of time, and wherein the eliminating comprises establishing a parallel connection to increase transmission capacity. van Landegem taught to determine the transmission capacity with a predetermined interval of time and to establish a parallel connection to increase transmission capacity (col.12, lines 15-40, 52-63, col.14, lines 54-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe, Gauvin, Gordon and van Landegem because van Landegem's teaching of determining transmission capacity and establishing parallel connection helps Pepe, Gauvin and Gordon's method to determine bandwidth availability in a periodic basis in a connectionless environment (e.g., first protocol, col.2, lines 14-19).

22. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, Gauvin and Gordon as applied to claims 1 and 18 above, and further in view of O'Connell et al (hereinafter O'Connell), US 6,661,787.

23. O'Connell was cited in the previous office action.

24. As per claim 9, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claim 1. Pepe further taught, opening, by the local proxy, a connection to the remote proxy using the first protocol following the act of intercepting the second-protocol data communication request (col.5, lines 48-61, col.7, lines 34-38, 59-65, col.8, lines 6-33) and Gauvin further taught, receiving, by the client interceptor, an identification of the server application (col.9, lines 61-67,

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col.10, lines 1-19). Pepe, Gauvin and Gordon did not specifically teach to forward the identification to an address-resolution server for first-protocol address resolution. O'Connell taught to use server identification to look up the network route and destination address using address resolution protocol (col.1, lines 55-67, col.2, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe, Gauvin, Gordon and O'Connell because O'Connell's teaching of address resolution using identification to look up network address enables Pepe, Gauvin and Gordon's method to identify the end station and the connection to the end station (col.1, lines 55-62).

25. As per claim 19, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claim 18. Gauvin further taught to comprise the means for receiving, by the client interceptor, an identification of the server application (col.9, lines 61-67, col.10, lines 1-19). Pepe, Gauvin and Gordon did not specifically teach a means for forwarding the identification to an address-resolution server for first-protocol address resolution. O'Connell taught to use server identification to look up the network route and destination address using address resolution protocol (col.1, lines 55-67, col.2, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe, Gauvin, Gordon and O'Connell because O'Connell's teaching of address resolution using identification to look up network address enables Pepe, Gauvin and Gordon's system to identify the end station and the connection to the end station (col.1, lines 55-62).

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26. Claims 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, Gauvin and Gordon as applied to claims 1 and 11 above, and further in view of Naudus, US 6,412,006.

27. As per claims 28 and 31, Pepe, Gauvin and Gordon taught the invention substantially as claimed in claims 1 and 11. Pepe, Gauvin and Gordon did not specifically teach that compensating further comprises closing idle connections to reduce costs. Naudus taught to reduce costs by removing the idle connections (col.10, lines 33-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pepe, Gauvin, Gordon and Naudus because Naudus's teaching of managing connections allows Pepe, Gauvin and Gordon's method to lower operation cost and monitor delay sensitive connections (col.10, lines 33-39).

Response to Arguments

28. Applicant's arguments filed 11/28/2005 have been fully considered but they are not persuasive.

29. In the remark, applicant argued: (1) The examiner has not provided any argument as to why use of the local proxy as an interceptor would as efficient as, or more efficient than, Pepe's disclosed manner of using of the local proxy. The interception of client requests in Gauvin does not carry over to Pepe. No motivation or suggestion in the prior art that would have led a person to modify Pepe by the teaching of Gauvin. (2) The references do not teach "compensating a

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disadvantageous characteristic of the first protocol, said compensating comprising ascertaining that a condition exists and eliminating the condition in response to said ascertaining, said condition being a connection condition or a transmission capacity condition". Examiner's argument as to why it is allegedly obvious to combine the teachings of Pepe, Gauvin and Gordon is based on circular reasoning and is therefore not persuasive. (3) The predetermined interval of time taught by van Landegem to determine transmission capacity is not the predetermined interval of time recited in claims 4 and 14. The predetermined interval of time recited in the claim is begin used to determine whether the transmission capacity is sufficient to process the data communication request. (4) Providing a server identification is the exact opposite of receiving a server identification. It is improper to argue that a claim feature is taught or suggested by a secondary reference through modification of another secondary reference.

30. Examiner traverse the argument that:

31. As to point (1), It is not understood why the applicant raised the question of "why use of the local proxy as an interceptor would as efficient as, or more efficient than, Pepe's disclosed manner of using of the local proxy?" since the local proxy, having intercepting functions, is taught by Pepe reference. Pepe clearly taught the local proxy and remote proxy to include the functionalities of the interceptor (col.5, lines 48-57, col.7, lines 17-23, 32-34, 66-67, col.8, lines 1-5, 16-25) and that the proxies can be of hardware, software or implemented on a firewall (col.7, lines 1-23). Although Pepe did not specifically teach that the proxies are interceptors, it is obvious that the proxies are interceptors since they present the functionalities and abilities of acting or being interceptors. Gauvin taught to use interceptors in intercepting the requests

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instead of proxies (col.2, lines 38-42, col.9, lines 5-7, col.12, lines 57-63) where the interceptor is a hardware device (col.10, lines 66-67: means for intercepting) (Pepe suggested that the proxy can be hardware). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe and Gauvin because Gauvin's teaching of using interceptors help to implement the proxies of Pepe's method as hardware means to intercept requests and establish communications (Gauvin, col.12, lines 57-63). Furthermore, the teachings of Gauvin's interceptors can be implemented into Pepe's teachings as the proxies since Pepe suggested that the proxies can be in hardware forms.

32. As to point (2), Pepe taught the invention to compensate a disadvantageous characteristic of the first protocol (col.9, lines 2-67, col.10, lines 1-6), said compensating comprising ascertaining that a condition exists and respond appropriately to the condition in response to said ascertaining, said condition being a connection condition or a transmission capacity condition (col.9, lines 2-67, col.10, lines 1-6; appropriate response to failures). Gordon taught to detect that a condition exists and eliminate the condition in response to said detection (col.6, lines 62-67, col.7, lines 1-22; known technique for detecting lost connection and re-establishing connection). Since Gordon clearly taught a method of detecting connection lost and reestablishing the lost connection, it is obvious that by combining Gordon reference with Pepe and Gauvin derives Pepe and Gauvin's method to gain the benefit of detecting connection lost and the ability to reestablish the lost connection. This is no circular reasoning, but rather logical and obvious. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pepe, Gauvin and Gordon because Gordon's

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teaching of determining broken connections and reestablishing connections enables Pepe and Gauvin's method gain the ability to monitor connections and re-establish the loss connections. This also enriches Pepe's teaching of the functions of ascertaining a condition exist and respond appropriately to the condition.

33. As to point (3), the claimed limitation of determining whether the transmission capacity is insufficient to process the data communication request is taught by Pepe (col.9, lines 26-32). This determination inherently require the knowledge of the required transmission capacity over time and the calculation of the actual transmission capacity to see if sufficient transmission capacity can be provided. The only limitation that Pepe failed to teach is that the determination is taken for a segment of time (i.e. predetermined interval of time). van Landegem taught to determine actual transmission capacity of a predetermined interval of time (col.12, lines 15-40, 52-63, col.14, lines 54-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe, Gauvin, Gordon and van Landegem because van Landegem's teaching of determining transmission capacity of a segment of time helps Pepe, Gauvin and Gordon's method to determine bandwidth availability in a periodic basis in a connectionless environment (e.g., first protocol, col.2, lines 14-19).

34. As to point (4), Gauvin reference does not teach that it is the interceptor that "provides" the server identification. As a matter of fact, Gauvin reference taught that it is the client application that performs the steps of 800-850 (step 820 provides server identification to the client application) and that the interceptor intercepts the execution flows of the performances of

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these steps (see col.10, lines 4-19). In response to applicant's argument that it is improper to argue that a claim feature is taught or suggested by a secondary reference through modification of another secondary reference, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Conclusion


35. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
February 24, 2006

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